# **CODE APPLICATION NOTICE**

**FILE NO.** 2-423A.1 **DATE:** August 20, 1996

# CONNECTION TO PATIENT MEDICAL GAS SYSTEMS

**CODE SECTION:** Section 423 A.1, CBC, and Section 4-3.1.1.9(a) and A-4-3.1.1.9(a) and A-4-6.1.2.1, Appendix A, 1996 1999 NFPA 99

**423A.1 Gas and Vacuum Systems.** The design, installation and testing of medical gas and vacuum systems shall be in accordance with NFPA 99 - 1996 1999, Standard for Health Care Facilities.

**4-3.1.1.9(a)** General. The first sentence of 4-3.1.1.9(a) "The medical air compressor shall take its source from the outside atmosphere and shall not add contaminants in the form of particulate matters, odor, or other gases." applies to both the distribution of the air in the piping system and to the use of a compressor as a source. It shall be connected only to the medical air piping distribution system and shall not be used for any other purpose.

**A-4.3.1.1.9(a)** It is the intent that the medical air piping distribution system support only the intended need for breathable air for such items as IPPB and long-term respiratory assistance needs, anesthesia machines, etc. and so forth. The system is not intended to be used to provide engineering, maintenance, and equipment needs for general hospital support use. It is the intent that the life safety nature of the medical air be protected by a system dedicated solely for its specific use. The medical air distribution system could also supply air-driven instruments that exhaust into the pharynx. This might be a dental or other surgical device.

As a compressed air supply source, a medical air compressor should not be used to supply air for other purposes because such use could increase service interruptions, reduce service life, and introduce additional opportunities for contamination.

**A-4-6.1.2.1 Piping Systems.** Piping systems supplying medical gases to patients should be reserved exclusively for that purpose so as to protect the patients from administration of gas other than that intended for their use. Therefore laboratory gas piping systems should not be used to pipe gas for use by hospital patients. This warning is also intended to apply to piping systems intended to supply gas to patients within a laboratory facility. Such a system should not be used to supply laboratory equipment other than that directly involved with the patient procedure.

### **INTERPRETATION:**

Application: Hospitals, Skilled Nursing Facilities (SNF) and Intermediate Care Facilities (ICF)

Piping systems supplying medical compressed air and medical gases to patients shall be reserved exclusively for patient use.

OSHPD will allow connection of these piping systems to outlets in areas used for testing and maintenance of patient devices which operate using such gases. These patient devices include but are not limited to ventilators and anesthesia machines.

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### **State of California**

# Office of Statewide Health Planning and Development

The intent of NFPA 99, Section 4-3.1.1.9(a) is to avoid contamination of the medical compressed air system used for patient care by keeping it separate from other uses such as engineering, maintenance and equipment. The testing of patient medical devices that operate using medical compressed air must also be performed using the same medical compressed air system, in order to avoid contamination of the equipment used directly for patient care.

OSHPD will allow connection of these piping systems to outlets in areas used for testing and maintenance of patient devices that operate using such gases. These patient devices include but are not limited to ventilators and anesthesia machines.

# **REASON:**

OSHPD views testing of patient devices requiring medical grade gases as a patient use. Therefore connection to these piping systems is consistent with NFPA 99.

ORIGINAL SIGNED	9/21/04
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